

Revisiting the Gender Voting Gap in the Era of Women’s Suffrage

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Abstract

Did expanding the electoral franchise to women matter for electoral politics? This paper examines the effect of introducing female voters in five of the first countries to enfranchise women. Using a difference-in-difference design, we test the two dominant theories in the literature. First is the “traditional” voting gap thesis, which claims that women’s role in the home and their relationship to religious institutions would have led them to support conservative parties. Second is the “family vote” hypothesis, which argues that female voters would merely double the vote for the existing parties. Studying Norway, the United States, Sweden, Canada, and the United Kingdom, we find that in four of five countries women’s enfranchisement boosted support for Liberal and Labour parties, contradicting both the traditional voting gap thesis, and the family vote hypothesis.

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Women’s enfranchisement “spells a disaster for Liberalism [. . . it would] add hundreds of thousands of votes throughout the country to the strength of the Tory Party.”

– Lloyd George of the United Kingdom, 1911.²

Extending the vote to women “will double the majority against us and make the country more communistic than it is already.”

–G.G. Stead of New Zealand, 1901.³

“By the way, I was a little amused at the fact that the women in the woman suffrage states voted almost exactly like the men. We (the only party which declared for woman suffrage) lost five of the seven suffrage states.”

–Theodore Roosevelt, 1912.⁴

Introduction

The admission of women into the voting public was one of the most remarkable social and political transformations of the last century. While only three countries extended full national voting rights to women prior to 1900, by 2000, in nearly every country where men could vote, so too could women.⁵ This sea-change in women’s rights was especially marked in what is known as the first “wave” of women’s enfranchisement, from 1890-1930, in which 23 countries reformed their national electoral laws to include women. A rich scholarship in political science has drawn our attention toward the role played by strategic leaders of women’s movements (Banaszak 1996, Graham 1996), male coalition partners (McConnaughy 2013), and competitive political parties (Teele 2014), in securing women’s voting rights. A lively debate centers around whether women’s enfranchisement in the United States left female voters without electoral leverage (Harvey 1996), or whether the very nature of interest-group politics and candidate-based campaigning was influenced by female

²Liberal Lloyd George to the party’s chief whip. Quoted in Blewett (p.55).

³Letter from G.G. Stead, chairman of directors of The Press, to John Hall, a conservative in the New Zealand Legislature. Quoted in Grimshaw (1972: 63).

⁴Republican President cum Progressive Presidential candidate in 1912 writing to British suffrage leader Millicent Garrett Fawcett. The Women’s Library, London 7MGF/A/1/Box 1/74/19-Nov-1912.

⁵The early enfranchisers include the Isle of Man, 1881; Cook Islands, 1893, while still a British protectorate; New Zealand 1893; and several territories and states on the United States’s western frontier.

voters (Andersen 1996). There is also a growing empirical literature on the effect of women’s enfranchisement on the welfare state which demonstrates that total expenditures by the state grew (Abrams and Settle 1999, Aidt and Dallal, 2008), and that budget allocations to health-related line items increased (Miller 2008), after women won political rights.⁶

And yet in spite of our now deep reservoirs of knowledge about the causes and the economic effects of women’s enfranchisement, save for recent work on the United States (Corder and Wolbrecht 2016; Morgan-Collins 2016), we know surprisingly little about the influence of women’s enfranchisement on the electoral fortunes of political parties.⁷ This is surprising because the voluminous literature on the political effects of male enfranchisement, which in some contexts has been shown to increase support for left parties and to increase political competition (Berlinski and Dewan 2011), naturally raises the question as to whether women’s enfranchisement had a similar effects, and if not, why.⁸

Theoretically, the literature has generated two competing predictions about the effect of women’s suffrage. Articulating what is known as the “family vote” hypothesis, some scholars have argued that women’s enfranchisement would likely double the electorate for any given party (McConaughy 2013), and would therefore have no influence on political or economic outcomes (Acemoglu and Robinson 2000: 1186; Rueschemeyer, Huber Stephens, and Stephens 1992: 48). Alternatively, Ingelhart and Norris’s (2000) seminal account of the gender voting gap suggests that prior to the second wave of feminism women were likely to be mobilized by traditional causes thanks to their domestic roles and deeper ties to religious institutions (see too Duverger 1955). The “traditional voting gap” hypothesis would therefore suggest that women’s enfranchisement should improve the performance of parties on the right.

In this paper we test both the family vote hypothesis and the traditional voting gap thesis in five early enfranchising countries. Using unique sub-national datasets for Norway, the United States, Sweden, Canada, and the United Kingdom, we conduct a series of difference-in-difference

⁶See too Bertocci (2010), Lott and Kenny (1999).

⁷Other exceptions include an eight country large-n study by Gerring et al. (2015) which examined political competition after the vote was extended to lower classes and women, and early studies by Duverger (1955), Tingsten (1937).

⁸See too Carruthers and Wanamaker 2014; Kroth, Larcinese and Wehrner 2015; Larcinese 2014; Vernby 2013.

analyses to examine the effect of women’s enfranchisement on party vote shares. (Details about case selection are contained below.) Our identification strategy makes use of the fact that the effects of a national-level reform were not necessarily homogenous throughout a given country. Because franchise reform would have increased the size of the electorate to a greater extent in places with a lower male-to-female ratio than in places with a greater share of women, the change in size of the eligible electorate after women’s suffrage depended on the mix of genders across locales. For example, mining towns or areas where oil is extracted typically have higher ratios of men to women than areas with large manufacturing or service-based industries. The uneven geographical distribution of women can therefore serve as a measure of the “intensity” of franchise reform in electoral constituencies. Under several assumptions, and when placed in a difference-in-difference framework, variation in the intensity of the reform can be used to estimate the causal impact of women’s enfranchisement on party vote shares.

Based on our analyses, we reject the wholesale validity of both the traditional voting gap thesis and the family vote hypothesis. For all countries but Sweden, the introduction of women’s enfranchisement did not increase support for conservative parties. In the United States, the passage of the Nineteenth Amendment resulted in higher levels of support for the Republican party, which in the era of women’s suffrage was linked to many progressive reforms (see too Corder and Wolbrecht 2016: ch 5; Morgan-Collins 2016). In the U.K. the 1928 Reform Act, which was presided over by Tory Prime Minister Stanley Baldwin, enfranchised women under 30 and those above 30 who were not part of the tax base. This reform increased support for the Liberals, and reduced support for the Conservatives. In Canada, too, the 1917 reform benefited the Liberals. And, in Norway, an examination of staggered reforms, where first wealthy women and then poorer women were enfranchised, shows that including wealthy women did not change vote shares for the major parties, but including poor women boosted support for the nascent Labour party. These remarkable findings, which indicate that in many instances women’s enfranchisement bolstered support for parties of the left, provides some evidence both that women’s suffrage did not merely double the vote shares for each party, and against the long-held idea of the traditional voting gap (Inglehart and Norris 2002). In the conclusion we consider several reasons why our results might differ from the conventional wisdom.

Why Would Women’s Enfranchisement Matter For Electoral Politics?

The two dominant theories about women’s votes in the early twentieth century suggest either that women’s votes would not matter or that they would tilt toward the conservative parties.

The “Family Vote” Hypothesis

A long-standing narrative in the democratization literature holds that empowering women politically would have little influence on political and economic outcomes (Acemoglu and Robinson 2000: 1186; Rueschemeyer, Huber Stephens, and Stephens 1992: 48) as adding women to the electoral rolls would merely double the votes for each party (McConaughy 2013). This argument, sometimes referred to as the “family vote” hypothesis, rests on the idea that men and women reside in households, and that members of households have similar political interests. In this case, integrating women into the electorate merely doubles the number of voters in each class so that under a Meltzer-Richards theory of electoral politics, women’s enfranchisement doubles the votes for each party.⁹

Research on the voting behavior of members of the same household, or between husbands and wives, lends some credence to this assumption. In a small study of parents of high school seniors in the 1970s, Niemi et al. (1977) show that husbands and wives exhibit high levels of agreement in voting behavior (upwards of 88 percent), although follow up research by Stoker and Jennings (2005) shows that spousal agreement in party identification may have been stronger in the prior to the 1970s than in the 2000s. Household sorting on party identification may be less common in other countries than in the United States. For example, Zuckerman and Kotler-Berkowitz (1998) use the comprehensive British Household Survey data from the early 1990s and report that only 58 percent of all household members cast ballots for the same party.

Summarizing the limited polling data available for the Netherlands, Norway, France and Germany in the 1940s and 1950s, Duverger (1955) finds that husbands and wives typically voted the same way. On the other hand, most of the literature on the United States suggests that women

⁹Acemoglu and Robinson (2000: 1186) claim in particular that women’s enfranchisement did not matter for redistribution, an argument that is contradicted by the literature cited in footnote 6.

somewhat more likely to vote for the Republican party (Corder and Wolbrecht 2016). Ogburn and Goltra (1919) found that women in Portland, Oregon, were more likely to support the Republican candidate Hughes. Willey and Rice (1924) also found a Republican preference among women in the 1920 presidential election. Looking at tallies from sex-specific ballots from Illinois, Tingsten (1937) reports that in the 1920 election the Republicans enjoyed a five-point lead among women. These findings suggest that female voters may not merely double the votes for each party.

The “Traditional” Voting Gap Thesis

The second theoretical prediction about women’s votes suggests that stemming from their roles as mothers, homemakers, and churchgoers, women would have voted more conservatively than men in the era of women’s suffrage (Norris 1988, Randall 1987). The rhetoric which stressed women’s moral superiority and purity were invoked to mobilize women for particular social issues and to justify their inclusion in politics.¹⁰ And the roots of feminist mobilization were often traced to specific programmatic agendas – such as temperance (Grimes 1967), abolition (Flexner 1995 [1959]: Ch 10), and the desire for educational reforms – which in some interpretations were the purview of more conservative parties.¹¹

The belief that women would support conservative issues was echoed by politicians in many countries during parliamentary debates about women’s suffrage. In the United Kingdom, as the paper’s opening quote suggests, Liberal leaders such as Lloyd George admitted fear that including women would spell disaster for the party because women would vote conservatively. In France,

¹⁰This sentiment is well illustrated by a declaration by Frances D. Gage (1851), an early American suffragist, in which she claims women’s enfranchisement will do more to “ameliorate the condition of mankind, to purify, elevate, ennoble humanity, than all that has been done by reformers in the last century.” Frances D. Gage was the president of the Akron Convention which supported women’s suffrage and justice for women, and which convened May 28-29 1851. The Convention was second of that nature in Ohio and the third to follow the famous Seneca Falls convention in 1848. It also closely followed the Ohio Constitutional Convention in 1851. The full text of Mrs. Gage’s speech is available pp.111-113 in Anthony et al. (1969 [1881]).

¹¹Temperance was on the agenda in the United States, New Zealand, Australia, and Norway, the move to adopt prohibition (Goldstein 1973; Norris 1988; Randall 1981; Tingsten 1937). But prohibition was not an important issue in most suffrage movements, including in the United Kingdom. Moreover, which party picked up the temperance issue varied across countries. While the Republican and Conservative Parties showed somewhat warmer reception to prohibition in the U.S. and Canada, the political right in Norway and New Zealand fiercely opposed such measures as a state intervention of the free market. Such differences generally stemmed from the fact that the temperance movements were both expressions of moral and social gospels as well as progressive demands that sought to ameliorate women’s position in the home.

Radical politicians cautioned that women in the countryside were in the pockets of the priests, claiming that enfranchising women would amount to “sealing the tombstone of the Republic.”¹² In Chile, it was a conservative Catholic leader, Abdón Cifuentes, who believed his party would benefit, that first presented a women’s suffrage law in the national legislature (Valenzuela 1995:141). And leaders of the German Social Democratic Party (SPD) believed that eventually women would become supporters of social democracy, but that initially women would support conservative issues (Evans 1980: 550).

In a handful of European countries, Duverger (1955) shows that although husbands and wives often vote the same way, when they differ, women tend to be more conservative than men overall.¹³ In the United States, Corder and Wolbrecht (2016) argue that female voters behaved quite similarly to male voters, but that in a few elections women evinced a slight Republican preference. This Republican preference was also adduced in early studies by Ogburn and Goltra (1919), Tingsten (1937), and Willey and Rice (1924). When interpreting the results from the United States, however, it is important to keep in mind that though the Republican party was linked to prohibition, it was not necessarily a conservative party in the early twentieth century. Thus our interpretation of the findings for the U.S. need to be nested in the political context of the times.

Empirical Approach

We examine the family vote thesis and the traditional voting hypothesis by studying the electoral consequences of women’s enfranchisement over six reforms in five countries. We outline our identification strategy, case selection criteria, and describe the data. In the following section we present results separately for each country and then highlight the similarities and differences across the cases. After the results are presented, we describe several potential sources of endogeneity and the tests we ran to examine them.

¹²Radical Senator Alexander Bérard, quoted in Hause and Kenney, 1984: 240.

¹³But he also finds that these differences vary by marital status, age, profession, and country. Married couples of the highest and lowest income brackets tended to vote together, while the wives of professional men voted differently from their husbands 17 percent of the time. Among the professions, businessmen and workers were the most likely to have wives that voted with them, while 17 percent of professional men’s wives voted differently than they did. In couples where the female was a member of a communist, agrarian, or labor party, men and women were much more likely to vote the same way than when members of conservative, Christian, or liberal parties (Duverger 1955: 46ff).

Identification Strategy

To examine whether electoral outcomes are causally related to women’s suffrage, our identification strategy attempts to isolate the effect of suffrage from its potential confounders by exploiting variation in the intensity of suffrage reform across locales. Although the female suffrage was generally adopted nationally, and typically affected all of a country’s electoral districts, some locales would be more affected by the reforms than others because the proportion of women varies geographically.¹⁴ Thus, while traditional studies of the effect of franchise extension have examined variation across cases, our approach makes use of the fact that reforms will have heterogeneous effects *within* cases depending on the relative proportion of men to women in different electoral constituencies.¹⁵

The idea behind the estimation strategy is simple: if, on average, women held electoral preferences that were distinct from men’s, those locales where the reform was more intense – because the female population was relatively large compared to other locales – should witness a larger changes in partisan support than locales with fewer women. This method is now a well-established strategy used in uncovering the effects of suffrage on electoral, political, and policy outcomes, particularly for reforms that affected the male franchise (Berlinski and Dewan 2011; Carruthers and Wanamaker 2014; Kroth, Larcinese and Wehrner 2015; Larcinese 2014; Morgan-Collins 2016; Vernby 2013). Specifically, we regress the change in partisan support before and after a suffrage extension on a continuous measure of the intensity of suffrage reform.

For each observational unit i in time t , the intensity of suffrage reform can be operationalized in several ways depending on the availability of data for any given country: 1.) some countries, like Norway and Sweden, recorded the size of the electorate by sex. For these countries we can use the proportion of the electorate that is female as a treatment measure: *women in the electorate* (%) = $\frac{WomenElectorate_{it}}{TotalElectorate_{it}}$; 2.) some countries, such as Canada and the United Kingdom, record only the

¹⁴The United States is an exception: 14 states fully enfranchised women prior to the Nineteenth Amendment, thus we restrict our attention to the 34 where enfranchisement was imposed by the amendment.

¹⁵At first glance one might think that women are always and only 50 percent of the population, but while it is generally true on average, it is not necessarily true for every constituency. (Think of New York City and Denver – “Menver” – which have higher ratios of women to men today.) These differences in sex ratios also varied significantly throughout history. For example, in the U.S., patterns of migration and economic employment opportunities in the frontier states determined sex ratios (Braun and Kvasnicka 2013). In some mining towns, there may have been only one woman for every five men.

size of the electorate i.e. how many people voted in each election. Here we can use the change in the (log) of the electorate as a proxy for the intensity of suffrage reform: *change in total electorate (%)* = $\ln(\text{TotalElectorate})_{it} - \ln(\text{TotalElectorate})_{i(t-1)}$. This measure particularly informative when women’s suffrage was the only reform implemented in a given year (more on this below); 3.) data for some countries, such as the United States, does not contain registration information, but instead reports information on the share of adult women in the population. This gives a rough measure of the eligible electorate: *women among adults (%)* = $\frac{\text{AdultWomen}_{it}}{\text{AdultPopulation}_{it}}$.

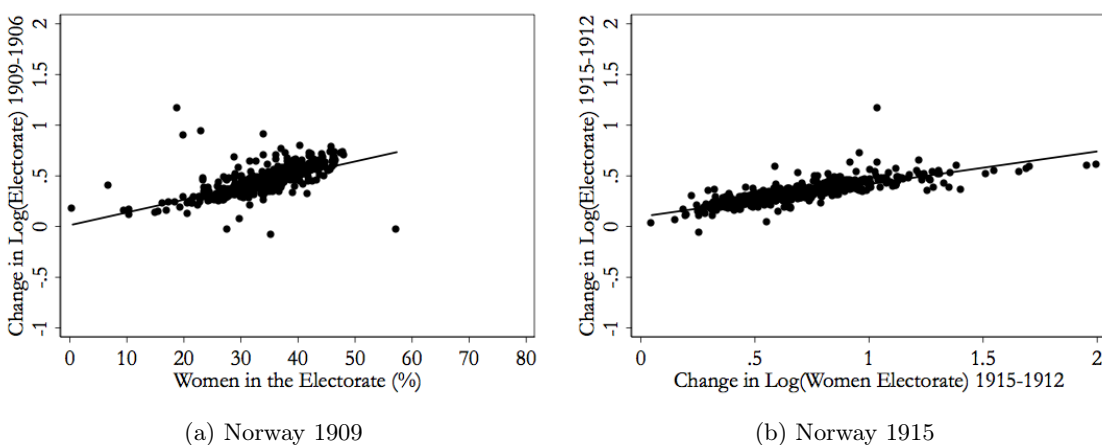


Figure 1: Correlation between two different measures of the dependent variable. The left hand panel shows that women as a percent of the electorate in 1909 (x-axis) is positively correlated with the percent change in the total electorate from 1906-1909 (y-axis). The right hand panel shows that the change in the percentage of women in the electorate between 1909 and the 1915 reform (x-axis) is positively correlated with the change in the total electorate from 1912 to 1915 (y-axis).

Data of type 1, which detail women in the electorate, likely provide the best proxy for the intensity of treatment, while type 3, women among eligible voters, may be the most imprecise. We examine the relationship between these measures in Figure 1, which presents a validation exercise using data from Norway by comparing measures of women in the electorate to the change in the total electorate. As discussed in more detail below, Norway enfranchised women in two reforms: in 1909 and 1915. As figure 1 shows, in both years, there is a strong positive correlation between the women in the electorate (x-axis) and the change in the electorate (y-axis).¹⁶

¹⁶The appendix presents similar data for Sweden in 1921, where the correlation is less strong due to the simultaneous large change in the male electorate. Note, however, that the growth in the male electorate in Sweden seems to be independent from the growth in the female electorate. The appendix also presents scatter-plots of the correlation

We present results separately for each country in our analysis, using a difference-in-difference estimator that takes one of the following forms:

$$\Delta Y_{it} = \alpha + \beta \frac{WomenElectorate_{it}}{TotalElectorate_{it}} + \Delta \epsilon_{it} \quad (1)$$

$$\Delta Y_{it} = \alpha + \beta \Delta \ln(TotalElectorate)_{it} + \Delta \epsilon_{it} \quad (2)$$

$$\Delta Y_{it} = \alpha + \beta \frac{AdultWomen_{it}}{AdultPopulation_{it}} + \Delta \epsilon_{it} \quad (3)$$

where ΔY refers to a change in partisan outcomes before and after suffrage; i refers to the observational unit whether municipalities, constituencies, ridings, or counties (see Appendix table 2); and t refers to the first general election after suffrage. $\frac{WomenElectorate}{TotalElectorate}$ refers to the proportion of women as a share of the registered electorate once suffrage is extended. It is equivalent to a percentage change as the pre-suffrage share of women in the electorate was zero. $\Delta \ln(TotalElectorate)$ refers to a difference in the log of the electorate before and after the reform. The log form allows for a natural interpretation of the change in the electorate in percentage terms. And $\frac{AdultWomen}{AdultPopulation}$ is the share of adult women among all adults in the population. Finally, ϵ_{it} is a random disturbance term. These estimation strategies are equivalent to a fixed effect strategy with local and time- dummies which capture potential fixed confounders at the local-level. Where data allows, we prefer the first indicator over the second as the second measure may include small changes to the male electorate that often occurred at the same time as women’s suffrage.

As can be seen in table 1, both the extent of the reform and the unit of analysis can differ by country depending on the level of detail reported in official sources. While Canada, Sweden, and the United States enfranchised the majority of women on the national level with a single piece of federal legislation, the United Kingdom and Norway extended voting rights gradually, initially enfranchising only women who met certain income, property or age criteria. For some countries we have access

between women in the electorate and the men in the electorate in Norway and Sweden. These graphs show these series to be uncorrelated, mitigating the fear that men were compensating for the threat introduced by female voters by registering in higher numbers.

to polling station data, while others report only higher-level information, for example, constituency level returns. Fine-grained data on the composition of the electorate by sex is available in Norway and Sweden, so we utilize the (logged) change in electorate size at the local level for women or percentage of women in the electorate. In the United States, fine grained data on the electorate or registered voters is not available, so we use the proportion of adult women. In Canada, data on women in the electorate is not available. Due to minor enfranchisement that proceeded the 1921 reform, the use of the proportion of adult women is not suitable. For Canada, then, we use overall growth in the electorate.

Case Selection

The scope of this study concerns the effect of women’s enfranchisement on party vote shares in the first “wave” of women’s enfranchisement, roughly from 1893 until just before the Second World War. We focus on this wave because the traditional gender voting gap is thought to apply in this period. In selecting cases we strove to have considerable overlap with the countries studied by Duverger (1955) and Inglehart and Norris (2001), and to find cases that met the following four criteria: that the women’s suffrage reform be at the national level; that a country resembled an electoral democracy before and after the reform; that women’s enfranchisement was not concurrent with any other major reforms; and that fine-grained data on electoral returns was available.

These case selection criteria are crucial for our identification strategy, which uses a measure of the “intensity” of suffrage in a given electoral unit to estimate the change in vote shares for political parties. The first requirement, that the reform must take place at the national level makes reasonable the assumption that the reform is “exogenous” to the size of the female population in any given electoral district. Second, the country had to resemble an electoral democracy before and after the reform, with a relatively stable party system across the relevant time period. This is critical because if parties do not exist prior to the reform or if they change too dramatically, we cannot examine changes in support for particular parties. Third, the suffrage reform must not be concurrent with other major electoral reforms, such as changes to the male franchise laws or during a year in which boundaries of local units were revised. The boundary change provision is a practical issue, but the single extension criterion is meant to avoid the problem of “multiple treatments”.

Table 1: **Data and Sample**

| Country (year) | Treatment Measure | Unit Studied | Embedded in | Redistricting? | N |
|----------------|----------------------------|-----------------|-------------------------|---------------------|------|
| Norway (1909) | women in electorate | Municipal | Districts*, Counties | 3% Municipalities | 629 |
| Norway (1915) | change women in electorate | Municipal | Districts*, Counties | 5.5% Municipalities | 660 |
| U.K. (1928) | change in electorate | Constituencies* | Counties, Regions | No | 578 |
| U.S. (1920) | women among adults | Counties | Districts*, States | 1.6% Counties | 2289 |
| Canada (1921) | change in electorate | Ridings* | Provinces | No | 221 |
| Sweden (1921) | women in electorate | Municipal | Counties | 0.7% Municipalities | 2576 |

Note: * Denotes units which refer to electoral constituencies. Locales which experienced redistricting during the relevant time period were excluded from the analyses, as were districts that were multi-member or uncontested.

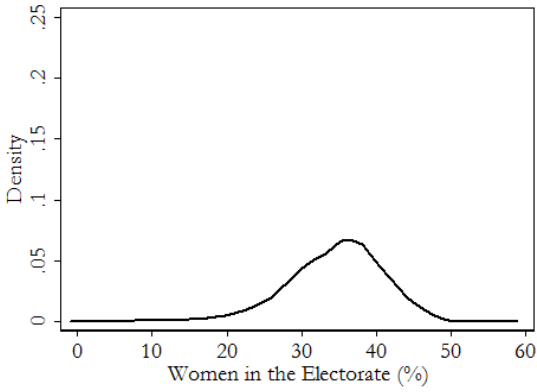
Fourth, in order to increase the within-country sample size, we must be able to locate electoral returns and turnout for electoral units smaller than the national level. Finally, we require electoral data from at least two elections prior to women’s enfranchisement so that we can do “placebo” tests.

Applying these criterion leaves us with the ability to study five cases: Canada, Norway, Sweden, the United Kingdom and the United States (*six when we include the in-progress Netherlands).¹⁷ Inglehart and Norris based their landmark study on data from Italy, Germany, Britain, Belgium, France, the Netherlands, and the United States. Among these countries, only the United States, the United Kingdom and Belgium, could pass the requirements necessary for our strategy. Germany was excluded because of substantive population changes between the relevant elections, France because the party system was not stable (and the country was not a democracy) prior to suffrage reform, Italy was also not a democracy prior to the reform, and the Netherlands adopted proportional representation and manhood suffrage in the year just prior to women’s suffrage. Our case selection strategy produces two cases in common with Duverger – Norway and the *Netherlands. Since both of their accounts emphasized a traditional voting gap, we will be able to make meaningful comparisons between our work and theirs. Table 1 summarizes the data and samples we utilize.

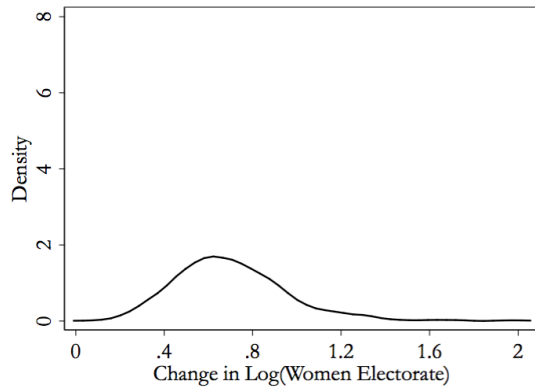
¹⁷Among the other first wave cases, New Zealand is excluded because the relevant parties were not solidified until after women got the vote. Australia is excluded because the electoral data is not available at the constituency level. The 1918 reform in the UK is excluded because a large proportion of men were also included in that measure (by some estimates up to 40 percent of men were still disenfranchised before then). Belgium, France, and Italy are second wave cases.

Variation in the Intensity of Suffrage

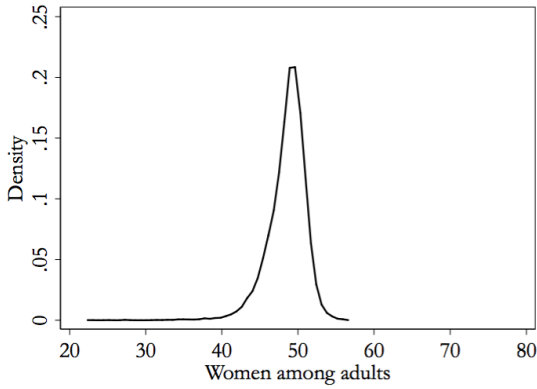
The estimation strategy will perform best if there is sufficient variation in the intensity of suffrage across locales so that small changes in the scope of enfranchisement can be linked to changes in partisan outcomes. For each country, we verify that there is a reasonable amount of variation in our key independent variable – the intensity of the “treatment” of electoral reform – within each observational unit measured in the way specified in table 1. Figure 2 presents kernel densities for the treatment variable in each country. Importantly, we see that the treatment variable varies substantially within each country. While in some locales the suffrage reforms had smaller impact, in others the size of the electorate increased considerably. In each case, these changes are driven by uneven distribution of the newly enfranchised women across locales. The distributions follow a similar pattern in each country, ranging from just above 0 to 1.8 with an average around 0.5. We find somewhat less variation in the treatment variable for reforms which enfranchised only some women, such as the second reforms in the U.K. and Norway. In the United States, the variation in the female vote across counties is also substantial, with 90 percent of all observations ranging from 44 to 52 percent.



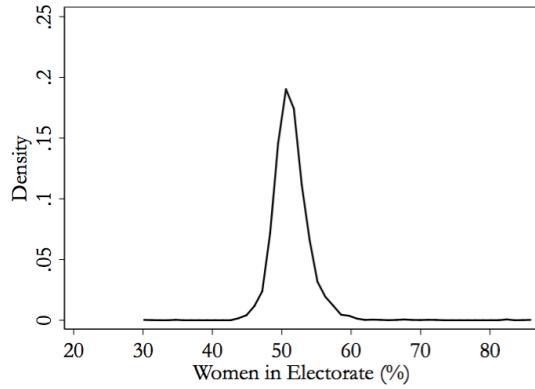
(a) Norway 1909, women in electorate



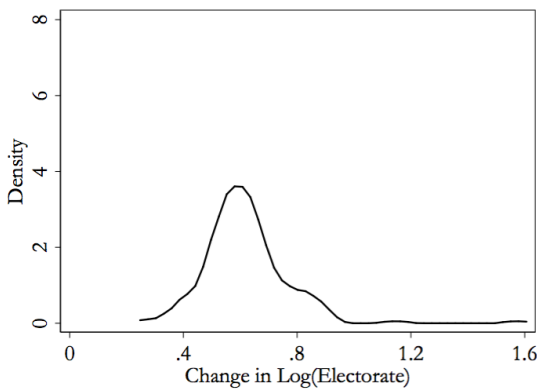
(b) Norway 1915, change women in electorate



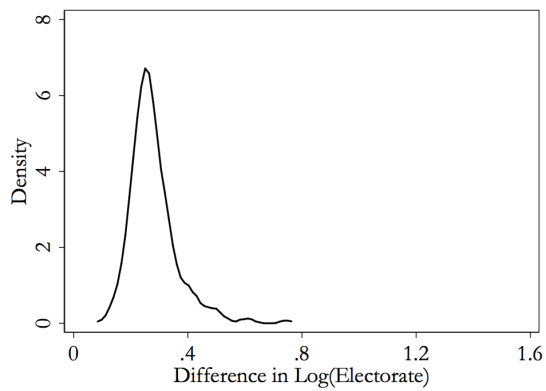
(c) U.S. 1920, women among adults



(d) Sweden 1921, women in electorate



(e) Canada 1921, change in electorate



(f) U.K. 1928, change in electorate

Figure 2: Density plots of the intensity of suffrage reform. Intensity is measured either by women in the electorate, the the change in the electorate, or women among eligible voters as listed.

Results

We present information on each of the included cases, including a brief history of the relevant reform and the relevant political actors along side results on the partisan effect of women's suffrage. Table 2 below gives a brief summary of the reforms in each country. We present results separately for each country but the presentation follows a similar pattern. The primary findings are depicted graphically for the whole set of countries in figure 3. For each suffrage reform, we first present baseline results from regression estimates. Where control variables are available, we include them in nested versions of the models in the appendix. Finally, we discuss placebo and correlational analyses that explore the threats to causal inference described above. In all specifications the standard errors that are presented are robust to heteroskedasticity.

Table 2: **Predictions**

| Country (year) | Reform | Party in Power at the time of suffrage adoption | Traditional Party |
|----------------|---|--|------------------------|
| Norway (1909) | Tax-paying women | Liberals | Conservative coalition |
| Norway (1915) | Non-tax-paying women | Liberals (in electoral coalition with Labour Democrats) | Conservative coalition |
| U.S. (1920) | Women in non-suffrage states | Democrats (President: Woodrow Wilson) | Democrats |
| Sweden (1921) | All women | Liberals (in coalition with Social Democrats) | Conservative |
| Canada (1921) | No soldier in family | Conservative (Borden's Unionist Government) | Conservative |
| U.K. (1928) | Women under 30 years and those above without property | Conservative (PM: Stanley Baldwin), Liberals and Labour oversaw 1918 reform. | Conservative |

Note: Extended details for this table are found in each country's discussion section.

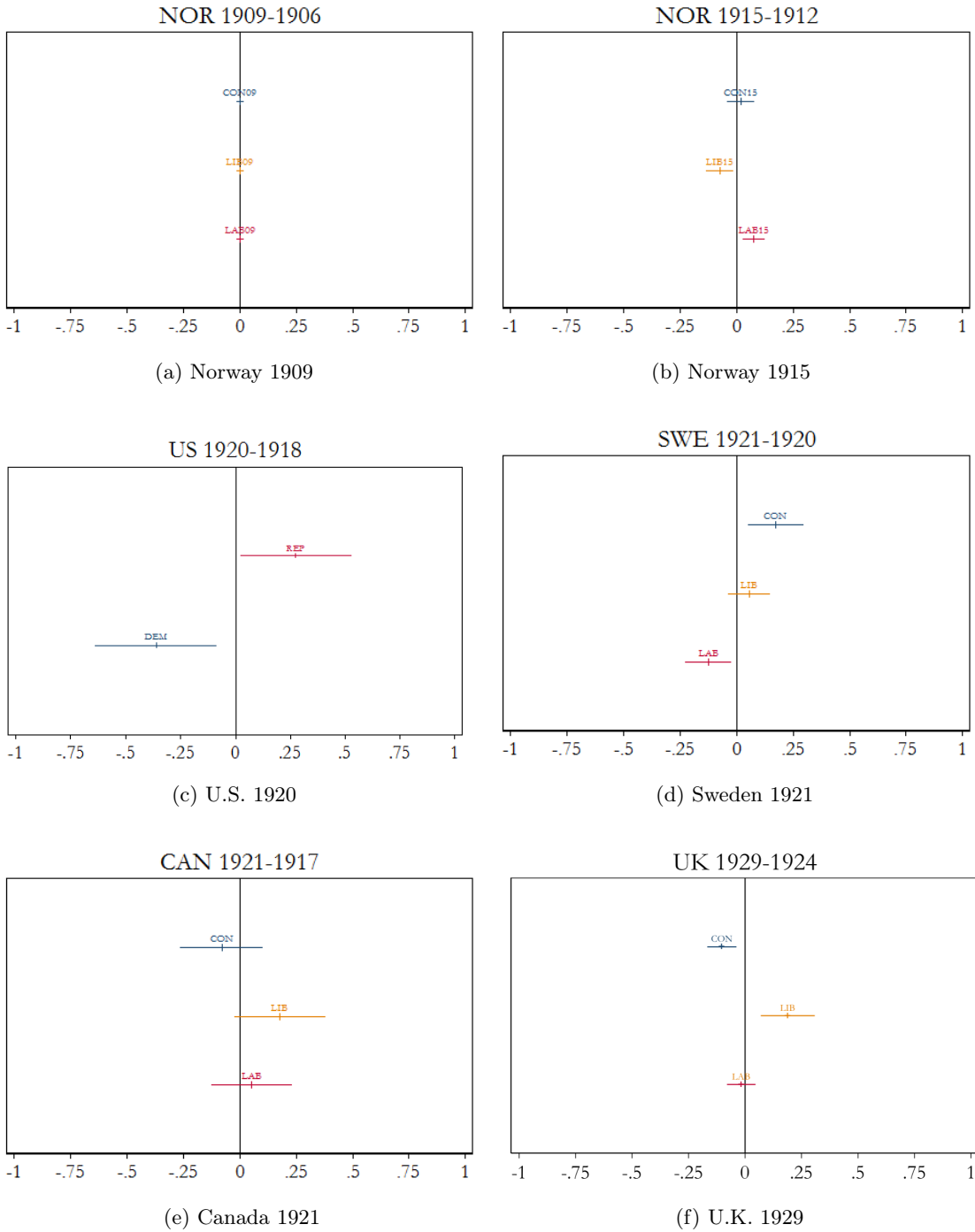


Figure 3: Baseline Results. The figures plot the coefficient estimates baseline regressions where the change in partisanship in the election after women were enfranchised is regressed on increase in the electorate with the addition of women to the franchise.

Norway

In Norway, women's enfranchisement followed a two-step process. First, women who paid taxes were admitted to the parliamentary franchise in 1906 and voted for the first time in 1909 election. On June 11, 1913 a paragraph added to constitution gave universal suffrage to all citizens over 25 years who had resided in country for five years. The 1915 election therefore represented the first with universal suffrage. This reform also enfranchised men on poor relief. However, given the fact that the proportion of men on poor relief was low and can be proxied by the proportion of votes that were suspended in the previous elections, we analyze the effects of both reforms. Our sample consists of about 600 municipalities which are embedded in electoral counties. Only one municipality changed boundaries during each reform.

The tide of nationalist sentiment that propelled Norway's dissolution with Sweden in 1905 bolstered the women's suffrage movement in that country. Led in part by the efforts of women in the Labour party, women demanded suffrage as a reward for their efforts in the nationalist movement.¹⁸ Although Duverger's (1955) Norwegian survey data show that women were more likely to support the Conservatives just after the Second World War, women's preferences at the turn of the century may have been better represented by Labour Democrats and Labour parties. In the era after the vote, the Labour Democrats and other labour groups championed the prohibition cause.¹⁹ In a similar vein, The Labour Democrats and Labour politicians showed interest in social reforms, seeking to ameliorate economic hardship and control industrial developments. While Labour remained underrepresented in the Storting until World War One, G. Knudsen's Liberal government, in cooperation with Labour Democrats, passed several laws that improved the lives of women and children at the time of suffrage (Derry 1973). Politically, the socialists and radicals were the driving political force behind suffrage, accepting partial economic suffrage in 1909 despite the fact that most of their electorate was not affected by the reform (Adams 2014).²⁰ Women's suffrage,

¹⁸In anticipation of a plebiscite to dissolve the union with Sweden, the National Woman Suffrage Association had prepared a petition with 300,000 signatures in support of seceding, mobilizing nearly all adult women in the country.

¹⁹The first temperance societies were established in the 1830s, organizing a formidable ten percent of the population by 1919. The Liberal party, although often split on the issue, initiated a plebiscite on the issue in 1919, attempting to avoid cooperation with Labour. The Conservative Party, on the other hand, perceived prohibition as a violation of economic liberties (Derry 1973).

²⁰On the other hand, the Conservative Party fiercely opposed suffrage, agreeing to partial economic suffrage for wealthy and middle-class women in their efforts to increase the support against the rising threat of socialism (Adams

in their view, marked an important concession in the wake of laws which aimed to control industrial developments. Since Labour and socialists did not gain legislative power until after World War I, it was again the Liberal party under G. Knudsen that granted municipal suffrage to all women in 1907 and national suffrage in 1913.

Tables 6 and 7 present results from two reforms in Norway in 1906 and 1913. A nice empirical feature of the two step reform is that we have a clear understanding of the class-basis of the included and excluded women. In the first reform, where only upper-class women were enfranchised, there is no overall change in support for the various parties. However, after the 1913 reform, which enfranchised the remaining adult women, the Labour party benefited. For every 10 percent increase in the electorate, Labour increased its vote share by about 8 percent in 1915. These gains were mainly at the expense of the Liberal block in 1915.

United States

The Nineteenth Amendment to the United States Constitution, which became federal law after Tennessee emerged as the 36th state to adopt the bill, was ratified on August 26, 1920, just a few months before the 1920 November elections. The amendment did not extend voting rights to women per se, but instead decreed that insofar as the various U.S. states conferred voting rights to their citizens, these rights could not be withheld on the basis of sex. This meant, in practice, that the Amendment produced voting rights for women – at the national, state, and local levels – in the 34 states that had not previously adopted full women’s suffrage. In those states where they were previously excluded, we examine the effect of women’s enfranchisement on the 1920 elections to the National House of Representatives.

The history of women’s suffrage in the U.S., which began with the entry of Wyoming to the union in 1893, was marked by the length of the struggle and the diversity of political groups which lent support to the movement at one point or another. Of the two national parties, the Republican Party was marginally more supportive of female suffrage (Banaszak 1996).²¹ After all,

2014).

²¹The Progressive party was a spinoff from the Republicans and not the Democrats, and, until Roosevelt, the Democratic Party represented agrarian interests and had its voting base was in the South (Gerring 2001).

the Nineteenth Amendment was passed in a Republican Congress and most of the state legislatures which ratified the Amendment had a Republican majority (Lemons 1973; Teele 2015, p.74).²² At the same time, both of the two main parties failed to take serious efforts before the war, jointly lobbying for the federal Amendment only for the 1920 election in order to claim its success (Bagby 1962). The national Republican and Democratic parties took women's suffrage on their platforms for the first time in 1916, and the Democratic president Woodrow Wilson is often credited with putting a firm shoulder behind the bill which would become the Nineteenth Amendment (Behn 2012).²³

Many contemporary analysts, journalists, and historians associated women with the Republican Party at turn of the Twentieth century (Tingsten 1937; Ogburn and Goltra 1919). While some contemporary accounts expected women to vote on their moral grounds or against the 'menace' of socialism, most frequently scholars stress women's engagement in the progressive, prohibitionist, abolitionist and suffrage movements (Andersen 1996, Skocpol 1996). Indeed, besides suffrage, the Republican Party at the turn of the twentieth was more supportive of prohibition (Kleppner 1987), racial equality (Bagby 1962), and often appealed to women's welfare preferences (Lemons 1973, pp. 87-9). In the 1920 election, despite the fact that some consider the Republican platform slightly more conservative, its broad social programs would impress most social feminists (Lemons 1973). James M. Cox, the democratic presidential nominee, was perceived as a candidate of the conservative South and reactionaries.

The effects of women's enfranchisement in the U.S., reported in Table 3, seem largely to have benefited the Republican party. In our efforts to use electoral data at the lowest level possible, our sample relies on over 2,000 counties which are embedded in about 300 electoral districts in the 34 states. We exclude from the sample about 1.6 percent of counties which changed boundaries in the

²²Teele (2015: 74) finds 70 instances in which a bill for full women's suffrage passed both houses of a U.S. state legislature. 64 percent of these were Republican dominated; 11 percent were Democratic; in 20 percent the legislature was divided; in 4 percent a third party controlled both houses. In the time period in general, the Republican Party was more prominent in the states than the Democratic Party.

²³Wilson is credited with a "conversion" to the issue of suffrage, but Behn argues that his stance evolved when he was trying to enhance his progressive bona fides ahead of his re-election campaign. He gave a famous speech to the Senate in September 1918 (months after the bill passed in the House) urging the Senate to adopt the reform. That vote failed by two votes, but the upper chamber acquiesced during a special session in June 1919 (Behn 2012: 322, 326ff).

1920 election. Table 3 reports results for the effect of the Nineteenth Amendment on partisan support of the two main parties.²⁴ All models return consistently positive estimates for the Republican Party and consistently negative estimates for the Democratic Party. After adding all controls, for every ten percent increase in the proportion of women among the eligible population, the Democrats lost 3.6 percent of their votes while the Republicans received a 2.76 percent voting bonus.

Sweden

Swedish women were among the first in Europe to have the municipal franchise, but among last to have parliamentary voting rights.²⁵ A suffrage movement was formed in Stockholm in 1902, and a national organization formed in 1904 which grew to 240 branches with 15,000 members, by 1905 there were 63 suffrage societies in the sparsely populated country. Bills presented to the parliament in 1902, 1904 and 1905 failed. But, after women procured 142,128 signatures on a suffrage petition in 1907, the Labour party took suffrage on its platform. The following year, in the wake hundreds of large public meetings, the Liberals and Social Democrats also took suffrage on their platforms (Hanaam et al.: 290ff).

In 1912, the Liberal Karl Staff presented the parliament with the first suffrage bill to gain clearance. This was passed 140 to 66 in the lower house (the Second Chamber), but was defeated in the conservative-dominated upper house 86-58 (the First Chamber). This split matched the partisan split in the first chamber, with 86 Conservatives and 64 Liberals and Social Democrats. Another massive petition, this time with 350,000 signatures, was delivered to the parliament in 1914. Although a suffrage measure with government backing passed the lower chamber before WWI, it was put aside during the war. In the election of 1917 the Liberals and Social Democrats formed a coalition in the lower chamber. The suffrage bill that would become law initially passed in May 1919, but due to a requirement that two consecutive legislatures approve electoral reform, the bill also needed to be passed by the parliament elected in 1920. Hence women's suffrage in Sweden only became a reality in 1921.

²⁴The results for the United States are taken from Morgan-Collins (2016).

²⁵A restricted local suffrage for women was introduced in 1862 which granted tax-paying widows and spinsters suffrage in all elections but parliamentary (Ray 1918).

One challenge in studying the effects of suffrage in Sweden is that at the same time that women were enfranchised, some of the country's strict qualifications were relaxed. Prior to 1920, men who were bankrupt, dependent upon poor relief, who were placed in a ward, did not perform national military service, or who had unpaid taxes, were ineligible to vote. In 1911 these qualifications disenfranchised 21 percent of the male electorate (Särlvik 2002: 235). By some estimates, the share of men that were disenfranchised when these qualifications were relaxed in 1920 dropped to 2 percent (Särlvik 2002: 241), while according to others the effect was more dramatic: from 34,908 people in 1919 to 16,685 in 1921 (Karlsson Sjögren 2013: 27).

Table 7 presents estimates of the change in support for the parties between the 1920 and 1921 elections and figure 3 presents these results graphically. Overall, in constituencies where women made up a larger share of the electorate, the Conservatives benefited more while the Labour Party lost. Thus, while the Liberals and the Labour party were jointly responsible for the reform, it seems that neither benefitted from the reform.

Canada

The very different legal and cultural milieus across Canada's provinces allowed a series of reforms to give women voting rights in some provinces prior to national enfranchisement.²⁶ Under a Conservative government, the first federal reform that enfranchised Canadian women at the federal level emerged as part of the Wartime Election Act of 1917, which attempted to manipulate the size of the electorate in order to increase support for military conscription (Brodie 1991).²⁷ While such manipulation distorted the electorate for political purposes, they were applied only in the 1917 election and allowed about half a million of women – about 20 percent of adult women – to vote in federal elections for the first time. Most Canadian women, however, were enfranchised by the 1920 Dominion Election Act, which allowed all non-indigenous women to exercise federal-level voting

²⁶In 1884, women could vote in municipal elections in Quebec and Ontario, followed by New Brunswick and Nova Scotia. In 1916, Manitoba, Saskatchewan Alberta and British Columbia gave women full provincial suffrage rights. In 1917, full provincial "active" suffrage in was granted in Ontario, allowing women to vote, but "passive" suffrage, which would allow them to hold office, was withheld.

²⁷This was achieved by disenfranchising naturalized citizens before 1902 who were born in the enemy country, and by enfranchising women who had served in the armed forces or who had relatives that were soldiers the right to vote.

rights in time for the 1921 election.²⁸

Given that the 1917 reform covered only a small share of Canadian women, and also disenfranchised some men, it is difficult to disentangle the effects of the two reforms on electoral outcomes. For this reason, we only focus on the second reform, in 1920, which enfranchised the vast majority of women while making only minimal changes to the male electorate. Our sample relies on about 200 ridings that are embedded in 10 provinces. Despite Canada's frequent redistricting, none of the ridings changed boundaries for the 1921 election. There were 31 uncontested ridings in the 1917 election, which were excluded from the analysis. As the Progressive party only emerged at the national level in the 1921 election, we cannot determine the effect of suffrage on Progressive votes in 1921.²⁹ Instead, we focus on the Conservative (formerly Unionist), Liberal and Labour parties. We code all votes for candidates who supported the conservative-led Unionist government as Conservative votes.³⁰

The suffrage movement in Canada resembled that of its American counterpart. In both cases, the suffrage movement drew much support from the temperance and progressive movements. It is therefore not surprising that women were expected to overwhelmingly support prohibition and, once enfranchised, to 'clean up' politics with social reforms (Bacchi 1983). In general, the Conservatives at the turn of the century tended to be slightly more supportive of temperance.³¹ Nevertheless, although the Conservative Party was more amenable to prohibition and even passed the Dominion Act which enfranchised all women in federal elections, out of the two major parties the Liberal Party was far more receptive to women's demands at the provincial level, enfranchising women in seven out of nine provinces (Cleverdon 1950).³² The Liberals even adopted women's suffrage on the federal plank ahead of the Conservatives.

²⁸Canada's Inuit and Indian peoples were excluded from the franchise until after WWII, and there were no rights for people of Japanese origins until 1948. Therborn (1977) lists 1945 as the date at which Canada achieved a democracy.

²⁹When votes for Progressives are coded in the Liberal block, the results remain substantively intact.

³⁰When such perhaps 'problematic' cases are either excluded from the analysis or coded according to their original party affiliation (such as Liberal-Unionists), the substantive results remain unchanged.

³¹The Conservatives provided legislative support to provinces which already passed prohibition and introduced temporary prohibition during the war for efficiency reasons (Blocker et al 2003). While the Liberals were forced by organized interests to hold a plebiscite on the issue in 1898, they refrained from implementing any legislation following the popular 'yes' vote (Blocker et al 2003).

³²The Labour party was not a prominent national party, as it received only 3 percent of national votes in 1921.

Before the 1921 election, the Liberals chose a party leader who was neither a part of the Unionist government during the war, nor a supporter of conscription during the war. If empowered, the Liberal party proposed to implement a number of labour reforms, which ranged from health and unemployment insurance to workmen's compensations. The party, moreover, opposed the protective tariff. The combination of class conflict and the legacy of the ethno-linguistic conflict over conscription resulted in a strong regional divide in the 1921 election. While Liberals won the election, their support outside Quebec was threatened by the agrarian Progressive party.

Table 4 presents estimates of the shifts in partisan support that followed after women's suffrage in Canada. The columns in each table introduce controls progressively, starting with province effects in the baseline models. The proportion of foreign born population and foreign born population in enemy countries are also included in the final models within each party block. These controls capture the size of the population which was affected by changes to male suffrage in the 1920 reform, which disenfranchised alien soldiers and enfranchised previously disenfranchised naturalized citizens from enemy countries.

After including all controls, women's votes had a small positive effect on support for the Liberal party, although this relationship is significant only at the 10 percent level. For every 10 percent increase in the electorate, the Liberals gained 1.8 percent of votes. Neither the Conservative nor Labour parties were affected by women's votes at the federal level. In sum, just prior to the 1921 election, the Conservatives had 57 percent of votes, while the Liberals had 39.9 percent. In 1921, the Conservative vote share fell while the Liberal vote rose. Our evidence suggests that the extension of the franchise to women may have played an important role in this shift.

United Kingdom

In the United Kingdom suffrage was extended to women under two separate pieces of legislation. Although the 1918 Representation of the People Bill admitted British women to the electoral registers for the first time, only women over 30 years of age who met minimum property qualifications were allowed to vote in the following years. At the same time that the 1918 bill expanded the franchise to some women, it also dramatically altered the eligibility laws for men and ushered in a wholesale re-districting. This makes the 1918 reform less than ideal for our analysis.

Instead, we consider the effect of the 1928 Representation of the People Act, which removed the age floor and property requirement making the voting laws universal in the U.K. for the first time.³³ The 1928 reform enfranchised about 5 million of women, 2 million of which were primarily working-class women and 3 million who were under 30 years and mostly industrial workers (Joannou and Purvis 1998). Importantly, too, is the fact that the boundaries of parliamentary constituencies remained the same.

The 1928 reform was presided over by Prime Minister Stanley Baldwin, who led the Tory party from 1923 to 1929, and then again from 1935 to 1937. The fact that the Tory prime minister was responsible for the reform is curious because the party had generally voted against women's enfranchisement both when it was presented on private member bills prior to 1914, and as members of the Speaker's conference on electoral reform in 1916 (Teele 2014). Although they led the parliament, the Tories may have believed their position to be quite vulnerable in 1928.

The 1928 reform came into effect in the 1929 parliamentary elections, so we study the change in partisanship that emerged in that election as compared with returns in 1924. In both 1924 and 1929, the U.K. had 579 electoral constituencies. Most of them were single-member districts, but 22 returned two MPs to Westminster. In 1924, there were 28 uncontested seats, but in 1929 there were only three constituencies in which a candidate ran unopposed. Excluding these from our analysis leaves a sample of around 526 constituencies in which to study the partisan effects of women's enfranchisement.

Table 5 presents estimates which show that the Conservative party seemed to lose from the reform – larger changes in the electorate between the two elections resulted in lower levels of support for the Tories. Nor was there any discernible change in the share of voters who supported Labour. On the other hand, the Liberal party seemed to benefit from the reform: for every 10 percent increase in the electorate, the Conservatives lost about 3.5 percent of voters, while the Liberals gained about 2.7 percent. Substantively, the increased support for the Liberal party in constituencies where the impact of the reform was greatest may not have been as important as the fall in support for the Tories. Indeed, the Liberals gained a mere 19 seats while the Labour party picked up 137 seats,

³³Although all men and women could vote on the same terms after 1928, the U.K.'s electoral law still allowed for plural voting, that is, for owners of multiple residences to vote in the constituencies of each residence.

surging to power with 288 MPs over the Tories' 260.

Endogeneity Concerns

In this section we address three main threats to our estimation strategy – that our results are driven by pre-existing trends, counter-mobilization of men, and concurrent reforms.

Threat to Inference 1: Pre-Existing Trends in Partisan Support

One of the advantages of the difference-in-difference specification is that it holds unobserved local characteristics fixed. The gravest concern of our identification strategy is that the estimates might be driven by pre-existing trends. For example, if partisan support for left parties grew more in locales which were affected by suffrage the most, our estimates would be biased and inconsistent. To address this possibility, we run a series of placebo tests where we regress the change in partisan support prior to the reforms on the key independent variable (Proportion of women in the electorate or difference in logged electorate). Using this method we can probe to see whether the locales that were the most affected by the reform were already becoming subject to different trends in partisanship than in those locales where the reform was less consequential. The only country for which we cannot test this assumption is Canada, where the War Time Election of Act of 1917 not only enfranchised a small proportion women, but also disenfranchised some men.

We present the results from all other countries in Appendix Tables 3, 4, 5 and 6. In most cases, the regressions returned small and insignificant estimates, suggesting that the parallel trend assumption is reasonable prior to the reforms. In Sweden, the placebo analyses show that the places where Labour lost the most were those where their support had been growing prior to the suffrage extension. On the one hand, this signals that pre-existing trends are not likely driving our results, although there could be regression to the mean whereby a big swing in the Labour favor in the 1920 election rectified itself in the 1921 election. On the whole, we conclude that our results are not driven by pre-existing trends: partisan support was not trending differently in locales most affected by the reforms.

Threat to Inference 2: Men’s Counter-Mobilization

Another concern for our identification strategy is that the partisan effects might be driven by men’s mobilization in locales most affected by the reforms. Previous research on the enfranchisement of black voters in the United States has shown that white voters mobilized at higher levels to ‘negate’ the voting power of black voters (Washington 2006; see to Enos 2011). In our study, if men mobilized at higher levels in localities with higher proportion of women, the results could be driven by men’s rather than women’s voting behavior. While we cannot address this issue for all countries, we can exploit the fact that some authorities kept voting records separately for women and men at the time of women’s suffrage, and look at whether more men turned out to vote in locales with higher numbers of women.

In the Appendix, we present results from these analyses in the whole of Norway, Sweden, and in Chicago, Illinois. In each case, we run two regressions, one that regresses our treatment variable on male turnout and another that regresses treatment on the change in male turnout in the first election after women’s suffrage. In Norway and Sweden, we utilize election data from the first election after the suffrage reform we analyze above. In Chicago, we utilize data from elections before the Nineteenth Amendment, 1911 and 1914. Overall, in appendix figure 2, we do not find a clear pattern of male response to women’s enfranchisement.

Threat to Inference 3: Concurrent Reforms as Multiple Treatments

Finally, we have to address the coincidence of other minor reforms that affected the scope of the male franchise along with the greater extension to women in Norway, Canada and Sweden. In the 1909 Norwegian election, although no other major reform was passed, we observe small changes to the male electorate. In 1915, a small proportion of men were enfranchised together with women. As these men were on poor relief, the positive effect on Labour after women’s suffrage could be at least co-driven by the newly enfranchised men. In Sweden, as described above, there were dramatic changes in the poor-relief qualifications, resulting in the enfranchisement of a substantial number of men in 1921. In Canada, the electorate for the 1917 election was manipulated by the war-time government to secure their continued power and to maintain conscription. In the 1917 election, all soldiers regardless of nationality were allowed to vote and naturalized citizens from

enemy countries were disenfranchised. These changes were only implemented for the 1917 election, allowing previously disenfranchised immigrants to vote and taking the vote from foreign soldiers. These changes mainly affected Western provinces and parts of Ontario, where the proportion of foreign born citizens was the highest.

In each case, we control for the size of the concurrent reforms in the models presented above. In this section, we provide further evidence that our results are driven solely by women's reforms. First, we utilize Swedish and Norwegian data on participation segregated by sex and show that any male concurrent reforms were not affecting the same localities as women's suffrage. Appendix graph 2. Second, we restrict our sample to localities which were affected the least by the concurrent reforms. In Norway, we restrict our sample to municipalities where changes to the male electorate were minimal between 1909-1906 and 1915-1912 (see Tables 11a and 11b in the Appendix). In Sweden, we restrict our sample to municipalities where male electorate grew the least between 1921 and 1920 (see Table 13 in the Appendix). In Canada, we restrict our sample to ridings which had low proportions of foreign born citizens and people born in enemy countries (see Table 12 in the Appendix). In each case, our results return comparable estimates regardless of such exclusions.

Summary of Findings

In spite of the diversity of the cases examined here we find several similarities in the effect of women's enfranchisement. For four out of six reforms we find no evidence of the family voting thesis. In one country, Norway (1909) there was no effect on party vote shares. And in only one country, Sweden (1921), did women's enfranchisement benefit the conservative party. Of all the reforms the Swedish is the most difficult to study insofar as there were substantial changes in the nature of the male franchise implemented in the same year. The results from Norway are perhaps the most compelling. Here we have the best measure of the intensity of the reform – the share of the electorate that was female in 1909, and the change in the size of the female electorate in 1915 – and a clear class-basis of each reform – propertied women in 1909 and the rest in 1915. The Norwegian data show that the first reform did not change the overall level of support for any of the parties, while the 1915 reform bolstered Labour at the expense of the Liberals. This is interesting both because it aligns with class-based expectations about women's votes. Overall, we find evidence that introducing female

voters did matter for electoral politics, and in most contexts, the effect was a leftward swing.

Discussion and Conclusion

In this paper we have examined the electoral consequences of women's enfranchisement on partisan support. Our identification strategy, which examines changes in partisan support based on the intensity of the female franchise at disaggregated electoral units, required four things: that reform be administered at the national level; that the country was a democracy before and after the reform, with relatively stable party system; that women's enfranchisement was not concurrent with other major electoral reforms; and that data is available at disaggregated electoral units. Studying six reforms in five of the early enfranchising countries, we do not find support for either the family vote hypothesis or the traditional voting gap thesis.

In the U.S. and the U.K. women's enfranchisement was not a conservative boon but instead resulted in increased support for the center and especially left parties. This is in spite of the fact that Conservative leaders attempted to get in front of wave by presiding over reform. These findings, coupled those from Norway and Canada, naturally raise the question of why our results are so different from the conventional wisdom. We offer three reasons to stimulate further research.

First, it is possible that the survey data on which Inglehart and Norris relied was not high quality, and therefore not representative of how women actually voted in the period. Second, it is possible that the data is acceptable for those countries but that the sample, wherein three out of seven countries experienced a period of authoritarian rule in the twentieth century, is not representative of other democracies that did not experience democratic reversals. Finally, it is possible that Inglehart and Norris were correct in their assessment that the 1970s were a period marked by traditional voting patterns among women, but that in the era after suffrage something else was true. This suggests that rather than a single inflection point in the 1980s, there were two.³⁴

While we cannot assess the merit of these mechanisms in full here, it bears being stressed that in all countries that we study save Sweden, the findings all point against Inglehart and Norris,

³⁴This could be due to U-shape curve in women's college education in the United States described by Goldin et al. (2006) or perhaps the U-shape relationship between women's mobilization and historical time in the 1900s (see, e.g. Harvey 1998).

but nevertheless in the same direction: in four largely Protestant countries, in constituents where women dwelled in higher numbers, Liberal and Labour parties performed better after the vote. This leads us to cast doubt on the wholesale validity of the “traditional” voting gap thesis. Interestingly, these reforms also did not inevitably produce wins for the parties that resided over the reform, as the Conservatives were in power in both Canada and the U.K. in the relevant moments. For these reasons, we also doubt an alternative explanation in which female voters were loyal to the party that enfranchised them absent any other programmatic commitments.

Our hunch, instead, is that women’s suffrage actually heightened support for parties with redistributive agendas. Several studies show, the fiscal impact of women’s enfranchisement was one of more expansive spending. As economic historians have pointed out, women’s labor force participation in today’s advanced industrial economies may be best described by a U-shaped pattern over the twentieth century in which women’s formal economic activity was lower in the middle of the century than it was on either tail (Goldin 1995). The early twentieth century marked, moreover, the emergence of the labor movement in many of today’s wealthy countries (RSS, Berins Collier 1999). Although the labor movement and leftist parties were often hostile to female laborers, and sometimes worked against women’s emancipation (Offen 2000: 165ff), in many contexts it was alliances with left parties,³⁵ and the large-scale mobilization of working class women into suffrage organizations,³⁶ which proved crucial for moving women’s suffrage bills through national legislatures. Thus to the extent that women’s political preferences were linked to gendered patterns of socialization, economic status, or policy commitments, bringing women into the electorate should have bolstered parties with more redistributive agendas.

³⁵Evans 1980 on Germany; Teele 2014 on the U.K.

³⁶Englander 1992 on California; Hagemann 2009 Norway; Lerner 1981 in New York; Strom 1975 on MA.

Table 4. The Effect of Suffrage on Party Support in Canada (1921-1917)

| <i>Dependent Var:</i> | <i>Δ Conservative</i> | | | <i>Δ Liberal</i> | | | <i>Δ Labour</i> | | |
|-------------------------|-------------------------|--------------------------|--------------------------|------------------------|-------------------------|--------------------------|-------------------------|------------------------|------------------------|
| <i>Model</i> | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Δ ln(Electorate) | 0.015 (0.109) | -0.088 (0.085) | -0.078 (0.093) | 0.07 (0.089) | 0.169 (0.103) | 0.179* (0.102) | 0.035 (0.074) | 0.04 (0.087) | 0.054 (0.09) |
| Foreign controls | x | x | Yes | x | x | Yes | x | x | Yes |
| Province FEs | x | Yes | Yes | x | Yes | Yes | x | Yes | Yes |
| Obs. | 192 | 192 | 191 | 192 | 192 | 191 | 192 | 192 | 191 |

Notes: Robust standard errors in brackets; All regressions include a constant; uncontested districts in 1917 are excluded from the analysis (N=31); districts with incomplete data in any election are excluded (N=18); Labour combines votes for Labour party, Socialist party and Opposition-Labour party, Conservative combines votes for Conservative party in 1921 and Government party in 1917; Liberal combines votes for Liberal party in 1921 and Opposition party in 1917; * p<0.1, ** p<0.05, *** p<0.001.

Table 5. The Effect of Suffrage on Party Support (1929-1924) in the United Kingdom.

| | (1) | (2) | (3) | (4) | (5) |
|---|-----------------------------|------------------------------|-----------------------------|-----------------------------|----------------------------|
| a.) Δ Labour | | | | | |
| $\Delta \ln(\text{Electorate})$ | -0.0167 (0.0320) | -0.0339 (0.0330) | -0.0255 (0.0384) | -0.0316 (0.0314) | -0.0191 (0.0374) |
| Observations | 474 | 474 | 468 | 468 | 468 |
| b.) Δ Liberal | | | | | |
| $\Delta \ln(\text{Electorate})$ | 0.189** (0.0606) | 0.159** (0.0602) | 0.139 (0.0778) | 0.159** (0.0613) | 0.0775 (0.0762) |
| Observations | 298 | 298 | 295 | 295 | 295 |
| c.) Δ Conservative | | | | | |
| $\Delta \ln(\text{Electorate})$ | -0.102** (0.0329) | -0.104*** (0.0309) | -0.0822* (0.0349) | -0.100** (0.0326) | -0.0435 (0.0381) |
| Observations | 470 | 470 | 465 | 465 | 465 |
| Country FE | x | Y | x | x | x |
| Country & County FE | x | x | Y | x | x |
| Controls 1921 | x | x | x | Y | x |
| Controls 1931-1921 | x | x | x | x | Y |

Notes: Standard errors are robust. Countries include England, Scotland and Wales. Data does not include Irish returns. Controls are from the 1921 and 1931 census recorded in Miller (1983). They include the $\ln(\text{population})$, the number of male textile workers and the number of female textile workers. The 22 constituencies with two seats were excluded as were the seats that were uncontested in either 1924 or 1929. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.001$.

Table 6. The Effect of Suffrage on Party Support (1909-1906) in Norway

| <i>Dep. Var:</i> | □ <i>Labour</i> | | | □ <i>Liberal</i> | | | □ <i>Conservative</i> | | |
|---------------------------------------|-------------------------|-------------------------|-------------------------|--------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|
| <i>Model</i> | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| % Women in the electorate 1909 | 0.001 (0.001) | 0.001 (0.001) | 0.002 (0.001) | 0.0002 (0.002) | -0.000 (0.002) | -0.0002 (0.002) | -0.003 (0.002) | -0.0002 (0.002) | -0.004 (0.002) |
| Controls | x | x | Yes | x | x | Yes | x | x | Yes |
| County FEs. | x | Yes | Yes | x | Yes | Yes | x | Yes | Yes |
| Obs. | 604 | 604 | 568 | 542 | 542 | 513 | 587 | 587 | 551 |

Notes: Robust standard errors in brackets; All regressions include a constant; Controls include change in a log male electorate 1909-1906; % married women in 1908 and a change between 1908-1903 and % inhabitants subscribed to any church in 1908 and a change between 1908-1903; Liberal refers to a coalition between Liberal Party and Labour Democrats in 1909. These parties often run in coalition at the municipal level; Conservative refers to a coalition between Conservative Party and Liberal Left in 1909 and Coalition Party - formed by Conservative Party and Moderate Liberal Party - in 1906; * p<0.1, ** p<0.05, *** p<0.001.

Table 7. The Effect of Suffrage on Party Support (1915-1912) in Norway

| <i>Dep. Var:</i> | □ <i>Labour</i> | | | □ <i>Liberal</i> | | | □ <i>Conservative</i> | | |
|--------------------------------|----------------------------|----------------------------|----------------------------|--------------------------|-----------------------------|---------------------------|--------------------------|-------------------------|------------------------|
| <i>Model</i> | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| □ ln (Women Electorate) | 0.057*** (0.024) | 0.061*** (0.023) | 0.077*** (0.024) | -0.037 (0.029) | -0.076*** (0.028) | -0.074** (0.03) | -0.024 (0.024) | 0.016 (0.025) | 0.021 (0.03) |
| Controls | x | x | Yes | x | x | Yes | X | x | Yes |
| County FEs. | x | Yes | Yes | x | Yes | Yes | X | Yes | Yes |
| Obs. | 624 | 624 | 559 | 624 | 624 | 559 | 624 | 624 | 559 |

Notes: Robust standard errors in brackets; All regressions include a constant; Controls include change in a log male electorate 1915-1912; % married women in 1914 and a change between 1914-1909 and % inhabitants subscribed to any church in 1914 and a change between 1914-1909; Conservative refers to a coalition of Conservative Party and Liberal Left. Liberal refers to a coalition of Liberal Party and Labour Democrats; * p<0.1, ** p<0.05, *** p<0.001.

Table 8. The Effect of Suffrage on Party Support (1921-1920) in Sweden

| <i>Dependent Var:</i> | □ <i>Labour</i> | | □ <i>Liberal</i> | | □ <i>Conservative</i> | |
|-------------------------|--------------------------|----------------------------|-------------------------|-------------------------|---------------------------|----------------------------|
| <i>Model</i> | (1) | (2) | (3) | (4) | (5) | (6) |
| □ ln(Electorate) | -0.191 (0.049) | -0.124** (0.052) | 0.069 (0.046) | 0.059 (0.047) | 0.146** (0.059) | 0.175*** (0.063) |
| Controls | x | Yes | x | Yes | x | Yes |
| County FEs. | x | Yes | x | Yes | x | Yes |
| Obs. | 2504 | 2504 | 2504 | 2504 | 2504 | 2504 |

Notes: Robust standard errors in brackets; Controls include a dummy variable for cities and towns and a change in the log of male electorate; Conservative refers to General Electoral League; Labour refers to Swedish Social Democratic Party; All regressions include a constant; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.001$.

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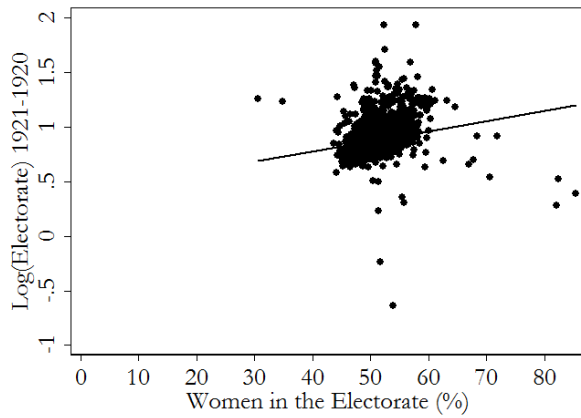
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APPENDIX

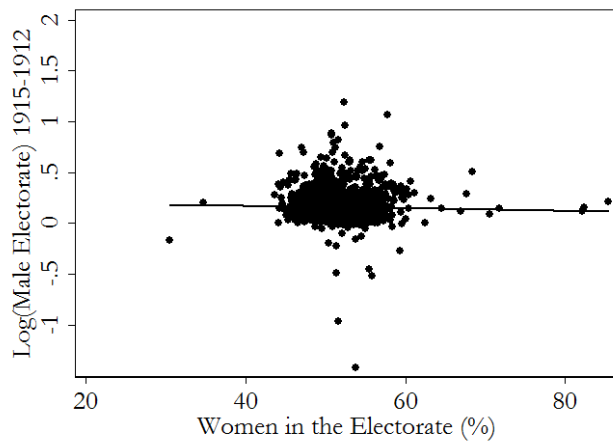
Appendix Figure 1: relationship between women as a share of the electorate and the change in the logged electorate. The 1918-1920 Swedish reform had a large effect on the male suffrage, so the correlation is not strong.

a) Sweden 1921

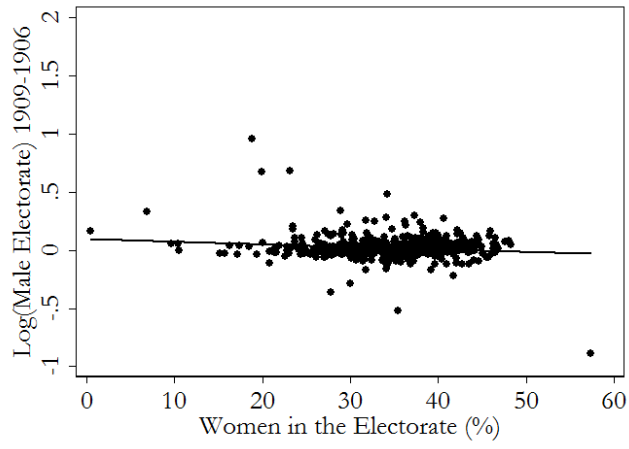


Appendix Figure 2: relationship between women as a share of the electorate and the change in the male electorate.

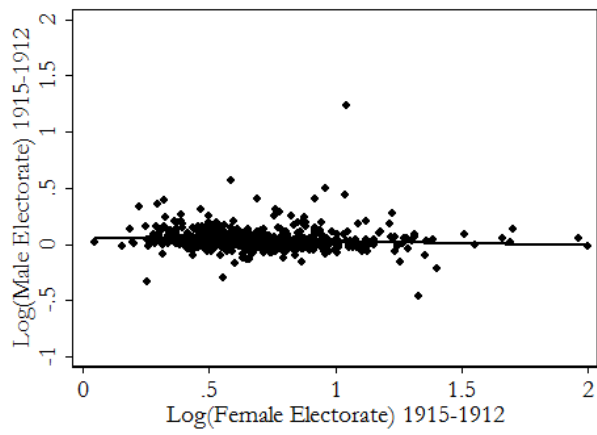
b) Sweden 1921



c) Norway 1909



d) Norway 1915



Appendix Table 3: Placebo Regressions (1918-1916) in the US

| <i>Dependent Variable:</i> | Δ <i>Republican Party</i> 1918-1916 | Δ <i>Democratic Party</i> 1918-1916 |
|--|---|---|
| <i>Model</i> | (1) | (2) |
| Female Vote (%) 1920 | -0.141 (0.165) | -0.098 (0.162) |
| District Fes | Yes | Yes |
| Controls (1919 & 1919-1914) | Yes | Yes |
| Obs. | 1953 | 1953 |

Notes: Controls for 1919 levels include: ln(population density); % Adult black; % Adult illiterate; % Roman Catholics; % Baptists; % Methodists; Value of all crops; Total manufacturing output; Differenced controls over 1919–1914 include all as above but % Total black population and % Adult male illiterate; Robust standard errors in parentheses; All models include a constant; *** significant at 1%; ** significant at 5%; * significant at 10%.

Appendix Table 4: Placebo Regressions (1912-1909) in Norway

| <i>Dependent Variable:</i> | □ <i>Labour</i> 1912-1909 | □ <i>Liberal</i> 1912-1909 | □ <i>Conservative</i> 1912-1909 |
|-----------------------------------|------------------------------|-------------------------------|------------------------------------|
| <i>Model</i> | (1) | (2) | (3) |
| □ ln(Electorate) 1915-1912 | -0.009 (0.027) | 0.068 (0.043) | -0.026 (0.037) |
| Controls | Yes | Yes | Yes |
| County FEs. | Yes | Yes | Yes |
| Obs. | 559 | 559 | 559 |

Notes: Robust standard errors in brackets; All regressions include a constant; All regressions include a constant; Controls include change in a log male electorate 1915-1912; % married women in 1914 and a change between 1914-1909 and % inhabitants subscribed to any church in 1914 and a change between 1914-1909; Conservative refers to a coalition of Conservative Party and Liberal Left. Liberal refers to a coalition of Liberal Party and Labour Democrats; * p<0.1, ** p<0.05, *** p<0.001.

Appendix Table 5: Placebo Regressions (1906-1903) in Norway

| <i>Dependent Variable:</i> | □ <i>Labour</i> 1906-1903 | □ <i>Liberal</i> 1906- 1903 | □ <i>Conservative</i> 1906-1903 |
|---|------------------------------|-----------------------------------|------------------------------------|
| <i>Model</i> | (1) | (2) | (3) |
| % Women in the electorate 1909 | 0.001 (0.001) | -0.001 (0.002) | 0.0002 (0.002) |
| Controls | Yes | Yes | Yes |
| County FEs. | Yes | Yes | Yes |
| Obs. | 565 | 510 | 548 |

Notes: Robust standard errors in brackets; All regressions include a constant; Controls include change in a log male electorate 1909-1906, % married women in 1908 and a change between 1908-1903 and % inhabitants subscribed to any church in 1908 and a change between 1908-1903 ; Liberal refers to a coalition between Liberal Party and Labour Democrats in 1903. These parties often run in coalition at the municipal level; Conservative refers to a coalition between Conservative Party and Moderate Liberal Party and Coalition Party in 1903 and Coalition Party - formed by Conservative Party and Moderate Liberal Party - in 1906; * p<0.1, ** p<0.05, *** p<0.001.